

## Monthly Wholesale Trade

Sales and Inventories February 1999

> BW/99-2 Issued April 1999

### U.S. Department of Commerce Economics and Statistics Administration BUREAU OF THE CENSUS

# MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES FEBRUARY 1999

**Note:** In order to incorporate information from the 1997 economic census, we will delay the release of revised data, originally scheduled for the week of May 3, until this summer. A new release date will be announced next month.

Sales. February 1999 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$217.6 billion, up 1.0 percent (+/-0.7%) from the revised January level and were 3.2 percent (+/-1.0%) above the February 1998 level. The January preliminary estimate was revised upward \$0.2 billion or 0.1 percent. February sales of durable goods increased 2.0 percent (+/-1.1%) from January and were 4.3 percent (+/-1.7%) above last February. Compared to last month, sales of motor vehicles and automotive equipment increased 5.7 percent, and lumber and other construction materials grew 2.5 percent. Among nondurable goods, sales of farm-product raw materials were up 3.0 percent from last month, while chemicals and allied products fell 5.4 percent.

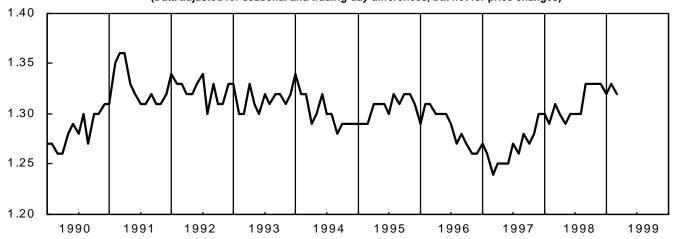
**Inventories.** Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were \$287.7 billion at the end of February, up 0.6 percent (+/-0.4%) from the revised January level and were 4.4 percent (+/-1.0%) above February 1998. The January preliminary estimate was revised downward \$0.4 billion or 0.1 percent. End-of-month inventories of

durable goods increased 0.5 percent (+/-0.5%) from last month and were 4.3 percent (+/-1.2%) above February 1998. Compared to last month, inventories of professional and commercial equipment and supplies increased 3.0 percent, while metals and minerals, except petroleum were down 2.0 percent. End-of-month inventories of nondurable goods increased 0.8 percent (+/-0.5%) from January and were 4.7 percent (+/-1.6%) above last year. Inventories of apparel, piece goods and notions increased 4.7 percent from January and beer, wine, and distilled alcoholic beverages were up 2.9 percent.

**Inventories/Sales Ratio.** The February inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.32. The February 1998 ratio was 1.31.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/97-RV Current Business Reports.

## Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1990 to 1999 (Data adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for March is scheduled to be released May 7, 1999 at 10:00 a.m.

Address inquiries concerning this report to Service Sector Statistics Division, Bureau of the Census, Washington, DC 20233, or call Ronald Piencykoski, (301) 457-2779 or 457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also available on the internet - http://www.census.gov/svsd/www/mwts.html.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1999 and 1998

[In millions of dollars]

[in millio	ns of dollars] Sales							Inventories						lnyon	orios	/Salas
												Inventories/Sales				
0101				Monthly		Percent chang		Monthly			Percent of			ratios		
SIC <sup>1</sup> code	Kind of business	Feb. 1999	Jan. 1999	Feb. 1998	Feb./ Jan.		Feb. 99 Feb. 98		Jan. 1999	Feb. 1998	Feb./ Jan.		Feb. 99 Feb. 98		Jan. 1999	Feb. 1998
coue	Dusiness	(p)	(r)	(r)	Jan.	Dec.	I ED. 90	(p)	(r)	(r)	Jan.	Dec.	1 <del>C</del> D. <del>7</del> O	(p)	(r)	(r)
Adjus	tod <sup>2</sup>	( -7	( )	(-)				(1-7	( )	(-)				\\-\/-\/-\	(1)	(-)
Aujus	U.S. Total	217,609	215.441	210,822	1.0	-0.9	3.2	287.725	285,906	275.478	0.6	-0.4	4.4	1.32	1.33	1.31
50	Durable	116.583	114,254	111,801	2.0	0.3	4.3	188.614	187,612	· ·	0.5	0.0	4.3	1.62	1.64	1.62
501	Automotive	20,856	19,733	18,159	5.7	0.7	14.9	29,005	29,139	29,490	-0.5	-1.2	-1.6	1.39	1.48	1.62
502	Furniture	3,445	3,395	3,356	1.5	1.8	2.7	5,671	5,615	5,501	1.0	-0.3	3.1	1.65	1.65	1.64
503	Lumber	8,125	7,928	7,391	2.5	-0.8	9.9	,	7,624	7,809	-0.5	1.8	-2.8	0.93	0.96	1.06
504	Prof. equip.	21,191	20,986	20,879	1.0	-2.7	1.5	,	24,191	26,556	3.0	-0.9	-6.2	1.18	1.15	1.27
505	Metals	8,463	8,566	8,922	-1.2	2.3	-5.1		14,751	14,182	-2.0	0.0	2.0	1.71	1.72	1.59
506	Electrical	17,966	17,417	16,896	3.2	0.7	6.3	,	27,718	25,838	1.4	-0.1	8.8	1.56	1.59	1.53
507	Hardware	6,962	6,853	6,679	1.6	2.1	4.2	13,575	13,692	13,079	-0.9	0.7	3.8	1.95	2.00	1.96
508	Machinery	17,985	18,111	18,378	-0.7	-1.8	-2.1	48,393	47,949	42,370	0.9	0.6	14.2	2.69	2.65	2.31
509	Other Durable	11,590	11,265	11,141	2.9	5.7	4.0	16,892	16,933	16,011	-0.2	1.2	5.5	1.46	1.50	1.44
51	Nondurable	101,026	10 1, 18 7	99,021	-0.2	-2.2	2.0	99,111	98,294	94,642	0.8	-1.1	4.7	0.98	0.97	0.96
511	Paper	8,005	8,025	7,280	-0.2	0.5	10.0	9,275	9,201	9,109	0.8	-1.4	1.8	1.16	1.15	1.25
512	Drugs	12,234	11,995	10,767	2.0	-1.9	13.6	15,968	15,764	14,103	1.3	0.7	13.2	1.31	1.31	1.31
513	Apparel	6,941	7,005	7,207	-0.9	2.1	-3.7	12,239	11,692	11,915	4.7	-3.9	2.7	1.76	1.67	1.65
514	Groceries	28,925	28,592	28,138	1.2	-1.1	2.8	16,410	16,164	16,380	1.5	0.3	0.2	0.57	0.57	0.58
515	Farm-products	8,500	8,250	9,298	3.0	-9.6	-8.6	11,860	12,049	11,084	-1.6	-3.0	7.0	1.40	1.46	1.19
516	Chemicals	4,219	4,459	4,747	-5.4	-1.8	-11.1	5,182	5,204	4,838	-0.4	0.7	7.1	1.23	1.17	1.02
517	Petroleum	11,257	11,586	12,104	-2.8	2.4	-7.0	4,140	4,090	4,470	1.2	1.4	-7.4	0.37	0.35	0.37
518	Alcohol	5,091	5,113	4,654	-0.4	1.9	9.4	5,751	5,588	5,135	2.9	2.0	12.0	1.13	1.09	1.10
519	Other Nondur.	15,854	16,162	14,826	-1.9	-7.4	6.9	18,286	18,542	17,608	-1.4	-2.6	3.9	1.15	1.15	1.19
Not A	<u>Adjusted</u>													Sale	es to d	late
														1999 1998		1998
	U.S. Total	199,286	195,400	193,114	2.0	-11.7	3.2	291,522	291,316	279,086	0.1	1.3	4.5	394,6	86 3	90,626
50	Durable	105,869	101,003	101,437	4.8	-12.4	4.4	188,979	187,121	181,251	1.0	1.4	4.3	206,8	72 2	03,447
501	Automotive	19,167	17,069	16,652	12.3	-15.9	15.1	30,223	29,693	30,729	1.8	3.9	-1.6	36,	236	32,982
502	Furniture	3,097	2,940	3,007	5.3	-13.6	3.0	5,524	5,497	5,363	0.5	0.0	3.0	6,	037	6,158
503	Lumber	6,866	6,493	6,238	5.7	-8.6	10.1	,	7,449	7,825	1.9	3.2	-3.0	,	359	12,603
504	Prof. equip.	19,305	19,055	19,000	1.3	-18.4	1.6		24,360	26,317	1.4	-0.1	-6.2		360	38,467
505	Metals	7,989	8,138	8,413	-1.8	2.7	-5.0	, , , , , , , , , , , , , , , , , , ,	14,913	14,154	-3.1	0.1	2.1		127	17,071
506	Electrical	16,385	15,466	15,409	5.9	-9.6	6.3	,	27,579	25,760	1.6	1.7	8.8		,851	30,696
507	Hardware	6,050	6,031	5,791	0.3	-4.6	4.5		13,473	13,079	0.9	0.8	3.9		081	11,776
508	Machinery	16,672	16,191 9,620	17,000 9,927	3.0 7.5	-13.9 -12.3	-1.9	, , , , , , , , , , , , , , , , , , ,	47,326	42,285 15,739	1.9 -1.1	0.3 2.9	14.1 5.7	32,	958	34,021 19,673
509	Other Durable	10,338	· ·				4.1		16,831							•
51	Nondurable	93,417	94,397	91,677	-1.0	-11.0	1.9				-1.6	1.1	4.8	187,8		187,179
511	Paper	7,565	7,873	6,872	-3.9	-2.7	10.1		9,367	9,100	-1.1	-2.2	1.8		438	14,213
512	Drugs	11,414	11,947	10,024	-4.5	-7.3 13.1	13.9	· '	16,930	14,343	-4.2	6.0 -0.4	13.1		361	20,849
513	Apparel	7,191 26,437	6,403 26,705	7,438 25,662	12.3 -1.0	-10.5	-3.3 3.0	· ·	12,206 16,116	11,998	0.9	-0.4	2.6 0.5		594 142	14,217
514 515	Groceries Farm-products	8,143	8,531	8,945	-1.0 -4.5	-19.0	-9.0		15,411	16,036 13,356	-7.5	0.4	6.7		674	52,127 19,722
516	Chemicals	3,936	4,183	4,434	-4.5 -5.9	-1.8	-9.0 -112		5,199	4,872	0.2	0.4	6.9		,119	9,028
517	Petroleum	10,582	11,540	11,402	-8.3	-2.7	-7.2		4,147	4,412	-1.3	-2.0	-7.2		122	23,549
518	Alcohol	4,134	3,768	3,779	9.7	-36.0	9.4		5,202	4,930	6.1	3.4	12.0		902	7,349
519	Other Nondur.	14,015	13,447	13,121	4.2	-21.2	6.8	,	19,617	18,788	-0.4	1.7	4.0		462	26,125
		,	-,	,				,0	,	2,: 20				,		-,

p Preliminary estimate. r Revised.

<sup>1</sup> For a full description of the SIC Codes shown above see the "1987 Standard Industrial Classification Manual" or the Current Business Reports "Annual Benchmark Report for Wholesale Trade" publication.

<sup>2</sup> Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used

Table 2. Coefficients of Variation and Standard Error for Sales and Inventories

	Kind of business	Coeffici	ents of v (x 1		or level	Sta	ındard er	ror for tro	end	Coefficients of variation for level (x 100)		Standard error for trend
SIC code		P relir estin	ninary nates	Final estimates		Ratio of two consecutive months		Year to year estimates		Cumulative sales estimates		Current year cumulative
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	Current	Previous	to
		M edian	M edian	M edian	M edian	M edian	M edian	M edian	M edian	year	year	previous year cumulative
	U.S. Total	1.0	1.3	1.0	1.3	0.4	0.2	0.7	1.0	1.1	1.1	0.7
50	Durable	1.9	2.2	1.9	2.2	0.6	0.3	1.0	1.2	1.9	2.3	1.0
501	Automotive	4.3	4.9	4.2	5.1	1.1	8.0	1.9	2.2	4.2	5.0	1.7
502	Furniture	6.5	7.7	6.6	7.7	2.2	0.8	3.6	2.6	6.2	6.5	1.4
503	Lumber	5.2	5.5	5.1	5.6	1.2	0.7	2.0	2.3	5.7	6.1	1.8
	Prof. equip.	5.2	6.3	4.9	6.1	1.3	0.6	3.2	2.7	6.3	5.8	3.2
505	Metals	4.6	9.4	4.6	9.2	1.1	0.8	1.5	3.1	5.2	4.7	1.4
506	E lectrical	5.9	6.4	5.9	6.3	1.5	0.6	2.1	2.4	6.4	6.2	1.9
507	Hardware	5.3	6.0	5.3	5.9	1.1	0.6	1.5	2.0	5.6	5.8	1.8
508	Machinery	6.4	6.3	6.4	6.3	1.7	0.6	2.8	2.1	6.3	6.7	2.8
509	Other Durable	6.1	8.0	5.9	7.9	1.7	0.9	2.9	2.2	6.8	5.8	3.0
51	Nondurable	1.9	2.2	1.9	2.2	0.6	0.5	1.0	1.3	1.7	1.8	0.9
511	Paper	4.9	5.1	4.8	5.0	1.1	0.6	2.3	2.4	4.8	4.7	1.7
512	Drugs	6.3	4.9	6.4	4.8	0.9	0.7	2.3	1.6	6.5	7.0	1.2
513	Apparel	5.2	7.7	5.1	7.6	2.0	1.1	3.0	2.6	4.8	5.2	2.4
514	Groceries	3.0	5.1	3.0	5.4	0.7	0.5	1.2	1.2	2.9	2.7	1.1
515	Farm-products	6.3	8.2	6.0	8.1	2.0	1.7	2.7	3.8	5.8	5.4	2.2
516	Chemicals	5.6	6.1	5.7	6.0	1.3	0.6	2.0	1.9	5.1	5.9	1.6
517	Petroleum	6.2	16.0	6.0	15.6	0.9	0.9	1.9	1.7	7.3	6.7	1.3
518	Alcohol	6.4	8.7	6.4	8.8	1.5	1.4	1.6	16.9	6.7	6.5	1.8
_519	Other Nondur.	6.3	6.6	6.4	6.6	1.8	1.1	4.0	4.1	6.6	6.6	3.9

Note: The median measures of variability are based on the most recent 12 months of data.

### Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is  $\pm 1.65$  x 0.9% or  $\pm 1.5\%$ , and the 90% confidence interval is -0.3% to +2.7%. If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value  $\pm 1.65$  x CV x (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample,

(2) inability to obtain information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 26 percent of the total monthly wholesale sales estimates and 28 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

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Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC	Kind of	Sales							Inventories						
code	Business		1999			1998		1999			1998		1998		
		Mar.	Feb.r	Jan.r	Dec.	Nov.	Feb.r	Mar.	Feb.r	Jan.r	Dec.	Nov.	Feb.r		
·	U.S. Total <sup>1</sup>	1.066	0.917	0.908	1.016	0.968	0.916	1.008	1.015	1.019	1.004	1.008	1.015		
50	Durable	1.077	0.907	0.883	1.006	0.967	0.906	1.001	1.003	0.997	0.984	0.990	1.003		
501	Automotive	1.129	0.919	0.865	1.036	0.957	0.917	1.009	1.042	1.019	0.969	1.005	1.042		
502	Furniture	1.045	0.899	0.866	1.020	1.046	0.896	0.992	0.974	0.979	0.976	0.993	0.975		
503	Lumber	1.016	0.845	0.819	0.889	0.931	0.844	1.026	1.000	0.977	0.964	0.969	1.002		
504	Prof. equip.	1.086	0.911	0.908	1.083	0.935	0.910	1.000	0.991	1.007	0.999	1.009	0.991		
505	Metals	1.105	0.944	0.950	0.946	0.938	0.943	1.013	0.999	1.011	1.010	0.971	0.998		
506	E lectrical	1.066	0.912	0.888	0.990	0.985	0.912	0.981	0.997	0.995	0.977	0.984	0.997		
507	Hardware	0.980	0.869	0.880	0.942	0.977	0.867	1.011	1.001	0.984	0.983	0.982	1.000		
508	Machinery	1.108	0.927	0.894	1.020	0.938	0.925	1.008	0.997	0.987	0.990	0.986	0.998		
509	Other Durable	1.039	0.892	0.854	1.029	1.068	0.891	0.959	0.985	0.994	0.977	0.992	0.983		
51	Nondurable	1.061	0.927	0.936	1.026	0.970	0.926	1.018	1.036	1.057	1.039	1.040	1.035		
511	Paper	1.071	0.945	0.981	1.013	0.951	0.944	1.004	0.999	1.018	1.026	1.021	0.999		
512	Drugs	1.057	0.933	0.996	1.054	0.980	0.931	1.003	1.016	1.074	1.020	1.003	1.017		
513	Apparel	1.122	1.036	0.914	0.825	0.921	1.032	0.962	1.006	1.044	1.007	0.968	1.007		
514	Groceries	1.041	0.914	0.934	1.032	0.981	0.912	0.981	0.982	0.997	1.006	1.036	0.979		
515	Farm-products	1.070	0.958	1.034	1.154	1.044	0.962	1.102	1.202	1.279	1.235	1.243	1.205		
516	Chemicals	1.060	0.933	0.938	0.938	0.938	0.934	1.020	1.005	0.999	0.999	0.995	1.007		
517	Petroleum	1.026	0.940	0.996	1.049	1.004	0.942	0.968	0.989	1.014	1.049	1.028	0.987		
518	Alcohol	0.996	0.812	0.737	1.173	1.014	0.812	0.978	0.960	0.931	0.918	1.078	0.960		
<u>519</u>	Other Nondur.	1.082	0.884	0.832	0.977	0.902	0.885	1.071	1.069	1.058	1.013	0.997	1.067		



#### r Revised

1 Adjusted sales and inventories data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.